

# BUILDING-INTEGRATED PHOTOVOLTAICS

## What Are They?

**Building Integrated Photovoltaics (BIPV)** are multifunctional solar products that generate electricity while also serving as construction materials. Photovoltaic technology uses energy from the sun to produce electricity in an environmentally friendly way. If you have used a solar powered calculator, you have seen photovoltaics in action. Today's BIPV products are flexible in shape, function and color and can become an affordable, beneficial and attractive part of a building's design.



100 Kilowatt System, Berkeley, CA. Courtesy of Powerlight

## How is BIPV Used?

BIPV systems can be aesthetically integrated into a building during the initial stages of design or added retroactively. The durable BIPV material can be used for:

- Roofing and awnings
- Facades, curtain walls and spandrels
- Skylights, atrium areas and any other photovoltaic glass applications

## Important Considerations

- Shading from other buildings or trees
- Average seasonal temperature
- Latitude of the site for optimal tilt and orientation

The power of solar



Courtesy of Atlantis Energy Systems

## Advantages of Using BIPV

- Architecturally clean and attractive
- Offsets the cost of facade, roofing or glazing materials
- Low maintenance costs, long life span (20-50 years)
- Consumers will spend more for homes with BIPV
- Stabilizes electricity costs
- Lowers cooling needs with BIPV awnings
- Provides reliable electricity from clean, renewable energy



Davis, CA. Courtesy of Atlantis Energy Systems

## For More Information

### BIPV designs & products\*

#### Unisolar

(800) 843-3892 (248) 475-0100  
[www.unisolar.com](http://www.unisolar.com)

#### Atlantis Energy Systems

(916) 920-9500  
[www.atlantisenergy.com](http://www.atlantisenergy.com)

#### Powerlight

(510) 540-0550  
[www.powerlight.com](http://www.powerlight.com)

### Renewable energy, rebates & tax incentives



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Mike Chrisman, Secretary of Resources

### California Energy Commission

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Arthur H. Rosenfeld, Commissioner  
James D. Boyd, Commissioner  
John L. Geesman, Commissioner  
Jackalyn Pfannenstiel, Commissioner

Robert L. Therkelsen, Executive Director



\*References to any companies are provided as a public service, and are not an endorsement, recommendation, or favoring of same by the State of California or the California Energy Commission.